

EXHIBIT 1

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TENNESSEE

-----:
ULTIMA SERVICES CORPORATION, :
:
Plaintiff, :
:
vs. : Case No.:
: 2:20-cv-00041-
U.S. DEPARTMENT OF AGRICULTURE, : DCLC-CRW
et al., :
:
Defendants. :
-----:

REMOTE DEPOSITION OF DANIEL CHOW

DATE: March 10, 2022
TIME: 10:06 a.m.
LOCATION: Rockville, Maryland
REPORTED BY: Shari R. Broussard, RPR, CSR
Reporter, Notary

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<p style="text-align: right;">Page 46</p> <p>1 it would mean merging up to a higher level as</p> <p>2 opposed --</p> <p>3 Q Okay. How about combined?</p> <p>4 A -- to merging a lower --</p> <p>5 Q I'm sorry to interrupt.</p> <p>6 A No, please go ahead.</p> <p>7 Q How about combined? Is it fair to say</p> <p>8 you combined six-digit, five-digit, four-digit</p> <p>9 NAICS code into a three-digit NAICS code?</p> <p>10 A Sorry, I'm thinking about how the</p> <p>11 process works.</p> <p>12 The -- the NAICS codes are already</p> <p>13 disaggregated at the six-digit level, so I did not</p> <p>14 specifically take the six digit and say remove</p> <p>15 data to make it a five digit and then remove data</p> <p>16 to make it a four digit and then remove data to</p> <p>17 make -- I didn't do that approach.</p> <p>18 What this study did was it looked --</p> <p>19 the -- the code looks at the six-digit level that</p> <p>20 is reported in SAM and then it removes the first</p> <p>21 three digits from that six-digit code. So there</p> <p>22 was no, in a sense, removing data or altering data</p>	<p style="text-align: right;">Page 48</p> <p>1 a federal contract and not received it?</p> <p>2 A I have no knowledge of whether they bid</p> <p>3 or did not bid on a contract. What I do --</p> <p>4 Q Okay.</p> <p>5 A What I do have is -- what I do have is</p> <p>6 some count of contracts, but I don't have any bid</p> <p>7 data as far as I know. I've not seen anything</p> <p>8 called bid.</p> <p>9 Q Is there anything in either of the two</p> <p>10 databases or any of the databases that you looked</p> <p>11 at which would tell you whether a specific</p> <p>12 registrant was eligible to bid on a contract?</p> <p>13 A No. I didn't look at -- I did not see</p> <p>14 any field that talked about eligibility criteria</p> <p>15 for bidding.</p> <p>16 Q Okay. Were there any entries in the</p> <p>17 FPDS database that provided contract data that did</p> <p>18 not match up with a registrant in the SAM</p> <p>19 database?</p> <p>20 A No, I did not look so deeply, but we --</p> <p>21 I used the DUNS number or CAGE code to match</p> <p>22 registered firms with their counterpart in the</p>
<p style="text-align: right;">Page 47</p> <p>1 to get at that three-digit code.</p> <p>2 Q No, I think I understand it. Okay. I</p> <p>3 think we sort of understand each other now.</p> <p>4 Does the FPDS database identify which</p> <p>5 agency awarded a specific contract?</p> <p>6 A I don't know the answer to that. I</p> <p>7 didn't look at that that deeply as -- as to</p> <p>8 whether that occurred and with the variables that</p> <p>9 I was given, which may be a subset of all the</p> <p>10 possible variables for the FPDS, I did not see a</p> <p>11 particular field for agency.</p> <p>12 Q Okay. So you didn't do any specific</p> <p>13 analysis for the Defendant, U.S. Department of</p> <p>14 Agriculture; is that right?</p> <p>15 A Correct.</p> <p>16 Q Okay. I'm going to ask some questions</p> <p>17 about both databases now. I asked this about I</p> <p>18 think the SAM database before, but let me make</p> <p>19 sure I understand.</p> <p>20 Did either of the databases -- let's</p> <p>21 just say any of the data- -- did any of the</p> <p>22 databases tell you whether a registrant had bid on</p>	<p style="text-align: right;">Page 49</p> <p>1 FPDS database in order to obtain characteristics</p> <p>2 from both sides.</p> <p>3 Q Okay. But I guess my question is did</p> <p>4 you have any things that didn't match where you --</p> <p>5 somebody won a contract, but they weren't in the</p> <p>6 SAM database?</p> <p>7 A It is possible, but I don't know</p> <p>8 specifically so.</p> <p>9 Q You don't have a specific recollection</p> <p>10 of that happening?</p> <p>11 A I don't think I ever analyzed it to such</p> <p>12 detail.</p> <p>13 Q So I'm going to ask you a few questions</p> <p>14 about the term "observation," which you used in</p> <p>15 your report.</p> <p>16 Can you tell me what you meant by</p> <p>17 "observation"?</p> <p>18 A Observations typically refers to a row</p> <p>19 in a dataset as opposed to a column.</p> <p>20 Q Okay. So in the report you say there</p> <p>21 was about 7.4 million observations from the SAM</p> <p>22 database and 5.1 million from the FPDS database.</p>

<p style="text-align: right;">Page 50</p> <p>1 Each of those numbers just refers to a row in the 2 database; is that right?</p> <p>3 A Correct.</p> <p>4 Q Okay. And then you said that you 5 combined the two databases into 5.6 million 6 registration observations by merging and removing 7 redundant and extraneous observations by DUNS 8 numbers.</p> <p>9 Can you just explain that process, 10 please.</p> <p>11 A Yes. The process -- because there may 12 be a lot of duplicate -- a large number of 13 duplicate observations where the registrant merely 14 changes something about their reporting identity. 15 Suppose they just change their address. Every 16 time some small change like that occurs, it 17 creates a brands -- it creates a new observation 18 for that firm. It could be anything. It could be 19 a phone number change, it could be an e-mail 20 change, it could be an attempt to -- to correct a 21 mistake in their records, it could be a change in 22 the size of the company for instance.</p>	<p style="text-align: right;">Page 52</p> <p>1 A Column data often refers to a variable. 2 There's a separate flag or variable for 3 registration date.</p> <p>4 Q So it would be one row in your database, 5 but there would be several checkmarks for 6 registration, not just one; is that right?</p> <p>7 A No. What I mean is that for a given row 8 there are multiple columns. Each column we can 9 call a variable. One of those -- at least one of 10 those variables will be called registration date 11 and there may be a couple others referring to 12 their -- whether they -- what day did they 13 register on and what their expiration date will be 14 because, as I understand -- as I understand it, 15 firms have to go back and reregister if they want 16 to maintain their status within their -- within 17 the -- the database.</p> <p>18 Q Okay. I think I get it, but we're not 19 coming up with a set of words that we can agree 20 on. So would there be a separate column, as you 21 say, for reregistering in addition to the initial 22 registration?</p>
<p style="text-align: right;">Page 51</p> <p>1 So in order to merge these two and 2 remove the so-called extraneous observations, I 3 had to make sure that there was the very latest 4 version of that firm's data and be able to sort 5 them by their DUNS and/or CAGE code.</p> <p>6 Q Your study covered a period of time in 7 excess of one year; is that right?</p> <p>8 A Eighteen months, correct.</p> <p>9 Q And to your knowledge are SAM 10 registrants required to be registered in SAM each 11 year?</p> <p>12 A Yes, it's either reregister or 13 recertify. It's -- I believe it's -- it's -- in 14 my mind that's synonymous.</p> <p>15 Q That's fine.</p> <p>16 And when you got the raw databases -- or 17 when you got the raw database of the SAM database, 18 would each annual registration or certification be 19 a separate observation?</p> <p>20 A That would be a separate column, not an 21 observation.</p> <p>22 Q Tell me what you mean by "column" then.</p>	<p style="text-align: right;">Page 53</p> <p>1 A Yes, that's what I'm saying.</p> <p>2 Q Okay. And so it wouldn't necessarily -- 3 you didn't have to eliminate an observation 4 because of a reregistration? That wasn't 5 necessary?</p> <p>6 A No, I -- I would -- I would have 7 included that firm if they reregistered; however, 8 if they did not register within a certain amount 9 of time, most likely that firm was dropped, yes.</p> <p>10 Q Okay. Okay. I want to go back to the 11 word "observations."</p> <p>12 At one point in your report you refer to 13 industry observations and you said you had about 14 1.1 million industry observations. I'm just 15 wondering what an industry observation is and how 16 that differs from the observations we were talking 17 about a minute or two ago.</p> <p>18 A That's your question?</p> <p>19 Q Yes.</p> <p>20 A Okay.</p> <p>21 Q That is my question.</p> <p>22 A Okay. So an industry observation refers</p>

<p style="text-align: right;">Page 58</p> <p>1 arithmetic, but I'm still not understanding why 2 they're not more industry observations. If we're 3 counting every NAICS code of an individual firm 4 and every firm has at least one NAICS code, why 5 aren't there more industry observations than 6 registration observations? 7 A There may be some data that are not 8 reported by the firms and if that data wasn't 9 reported, maybe those observations weren't 10 included in its given industry. So perhaps they 11 didn't report the number of employees, for 12 instance. So the condition may be set that -- a 13 condition may occur where it wasn't included in 14 that particular set of NAICS industries, so you'd 15 get fewer -- fewer observations in the -- in the 16 NAICS -- among NAICS industries, the distribution. 17 Q Okay. So at the end of the day in 18 Table 3 in your Pooled Regression Results, you 19 indicated about a half a million observations, 20 right? 21 A Correct, 504,000 or so. 22 Q Yes. Tell me what those observations</p>	<p style="text-align: right;">Page 60</p> <p>1 receipts. I don't have the entire list in front 2 of me. 3 Q Okay. And the same question for the 4 FPDS database where I think you indicated that 5 there were 55 variables. 6 A Yes. So those would -- they include 7 things like variables such as whether it was a 8 Veteran owned, the type of organization, the -- 9 whether it was women owned, minority owned, those 10 kinds of things. Again, I -- I don't have the 11 entire list in front of me. 12 Q That's fine. 13 And then you combine them into 64 14 variables I believe; is that right? 15 A Yes. 16 Q Okay. And tell me how you combined the 17 42 variables from the SAM database and the 55 18 variables from the FPDS database into 64 19 variables. 20 A Well, I used the Stata code and merged 21 by DUNS or CAGE depending on the step in the 22 process and this allowed me to remove any</p>
<p style="text-align: right;">Page 59</p> <p>1 are. 2 A Well, these are observations that are -- 3 excuse me while I look it up. 4 So these are the observations that have 5 some value in regards to the 18 or so 6 characteristics that were shown in Table 3. So 7 these are the ones that have data that allow a 8 regression analysis to occur and also they're a 9 result of some collapsing or aggregating of data 10 after some filtering out of duplicates and so on 11 and so forth. 12 Q Okay. Okay. I want to move on to the 13 variables. 14 You combined 42 variables from the SAM 15 database -- well, let's start with that. 16 You said that the SAM registrant data 17 have 42 variables, right? 18 A Forty-two that were used, correct. 19 Q Okay. And give me some examples of what 20 they were. 21 A DUNS number would be the, like, address 22 of the firm, maybe the firm's employment number,</p>	<p style="text-align: right;">Page 61</p> <p>1 variables that were not necessarily needed for the 2 study. 3 I took a more conservative approach by 4 including possible variables that might be useful 5 and I chose those variables because I did not have 6 the code provided to me at the time, so I did an 7 educated guess as to which of the most important 8 variables were needed. So by the time I received 9 the code and was able to do the correct and proper 10 merges, a number of variables were -- were safely 11 dropped. 12 So 64 was the number. And that's -- 13 that might have included a couple of variables 14 that I still kept in case I needed to backtrack 15 and rerun something. 16 Q Okay. Let me see if I understand it. 17 Did you do the merging of the variables prior to 18 getting the databases? 19 A No, I -- I don't get databases, I get 20 datasets. 21 Q Fair enough. Datasets. 22 A So I did not merge -- do any merging</p>

<p style="text-align: right;">Page 114</p> <p>1 Q Okay. Did you ask for any data</p> <p>2 concerning bidding by firms on federal contracts?</p> <p>3 A No, I did not.</p> <p>4 MR. ROSMAN: That's it. I'm done.</p> <p>5 MS. DINAN: I think we're all set. We</p> <p>6 would like to review and sign. I believe if</p> <p>7 Ms. Broussard could give us her contact</p> <p>8 information so we can go through the appropriate</p> <p>9 process to request a transcript, that would be</p> <p>10 great. I don't know exactly what we'll need.</p> <p>11 (Whereupon, at 2:04 p.m., the</p> <p>12 deposition of DANIEL CHOW</p> <p>13 was concluded.)</p> <p>14 * * * * *</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p>	<p style="text-align: right;">Page 116</p> <p>1 A C K N O W L E D G E M E N T</p> <p>2 O F D E P O N E N T</p> <p>3</p> <p>4 I, DANIEL CHOW, do hereby acknowledge I</p> <p>5 have read and examined the foregoing pages of</p> <p>6 testimony, and the same is a true, correct and</p> <p>7 complete transcription of the testimony given by</p> <p>8 me, and any changes or corrections, if any, appear</p> <p>9 in the attached errata sheet signed by me.</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <hr/> <p>20 Date DANIEL CHOW</p> <p>21</p> <p>22</p>
<p style="text-align: right;">Page 115</p> <p>1 C E R T I F I C A T E O F N O T A R Y P U B L I C</p> <p>2 I, SHARI R. BROUSSARD, the officer before</p> <p>3 whom the foregoing deposition was taken, do hereby</p> <p>4 certify that the witness whose testimony appears</p> <p>5 in the foregoing deposition was duly sworn by me;</p> <p>6 that the testimony of said witness was taken by me</p> <p>7 in stenotype and thereafter reduced to typewriting</p> <p>8 under my direction; that said deposition is a true</p> <p>9 record of the testimony given by said witness;</p> <p>10 that I am neither counsel for, related to, nor</p> <p>11 employed by any of the parties to the action in</p> <p>12 which this deposition was taken; and, further,</p> <p>13 that I am not a relative or employee of any</p> <p>14 counsel or attorney employed by the parties</p> <p>15 hereto, nor financially or otherwise interested in</p> <p>16 the outcome of this action.</p> <p>17</p> <p>18</p> <p>19 SHARI R. BROUSSARD</p> <p>20 Notary Public in and for the</p> <p>21 District of Columbia</p> <p>22 My commission expires:</p> <p>August 14, 2025</p>	<p style="text-align: right;">Page 117</p> <p>1 Christine Dinan, Esquire</p> <p>2 Department of Justice</p> <p>3 Civil Rights Division</p> <p>4 Employment Litigation Section</p> <p>5 150 M Street, Northeast</p> <p>6 Washington, D.C. 20530</p> <p>7 IN RE: Ultima Services Corporation vs. U.S.</p> <p>8 Department of Agriculture, et al.</p> <p>9 Dear Ms. Dinan:</p> <p>10 Enclosed please find your copy of the</p> <p>11 deposition of DANIEL CHOW, along with the</p> <p>12 original signature page. As agreed, you will</p> <p>13 be responsible for contacting the witness</p> <p>14 regarding signature.</p> <p>15 Within 30 days of March 18, 2022, please</p> <p>16 forward errata sheet and original signed signature</p> <p>17 page to counsel for Plaintiff, Michael E. Rosman.</p> <p>18 If you have any questions, please do not</p> <p>19 hesitate to call. Thank you.</p> <p>20 Yours,</p> <p>21 Shari R. Broussard, RPR, CSR</p> <p>22 Reporter/Notary</p> <p>cc: Michael E. Rosman, Esquire</p>